

RECRUITMENT PACK

This document includes the following information:

- Job Description
 - Person Specification
 - Additional information
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Making an application:

Please complete the short on-line application form, which includes some standard questions, and attach the following documents. (Shortlisting is undertaken by a panel after the closing date on the basis of information provided.)

- a. A covering letter - explaining why you are interested in this post, and giving examples to demonstrate how you meet the requirements of the job as outlined in the Person Specification.
 - b. A curriculum vitae - giving full details of your qualifications and experience to date.
- Links to Guidance Notes and Frequently Asked Questions can be found on the Search Results page. These pages will open in a new window.
 - **We recommend that you take a copy of this recruitment pack to help with your preparation.**

A commitment to sustaining an inclusive and diverse community is one of the University's Core Values and we are keen to address any imbalances in our workforce.

The University of Essex is proud to be part of the Disability Confident scheme and is committed to supporting diversity and equality, representative of our inclusive community. As part of our commitment to this scheme any candidate who has a disability and meets all the essential criteria for the role will be offered an interview. We also work in partnership with national disability organisation [DisabledGo](#) who provide detailed online access guides to many of our campus buildings and facilities which you may find useful.

Please note: We are only accepting on-line applications for this post. However, if you have a disability that makes it difficult for you to provide us with information in this way, please contact the Resourcing Team (01206 876559) for help.

Closing Date: 21 January 2019

Interviews are planned for: Late January 2019



JOB DESCRIPTION – Job ref REQ02156

Job Title:	Data Scientist (Machine Learning and Data Visualisation (KTP Associate))
Contract:	Full-time. Fixed term for 36 months. The position is fixed term due to being part of a Government funded innovation programme, however there may be potential to continue in employment with the company partner following the completion of the KTP. <i>This role is subject to funding. Funding outcome due January 2019.</i>
Hours:	40 hours per week (standard working week for host company)
Salary:	£33,800 - £37,400 per annum
Department/School/Section:	School of Computer Science and Electronic Engineering (CSEE)
Responsible to:	Head of School of Computer Science and Electronic Engineering
Responsible to on a day to day basis:	Academic Supervisor, University of Essex and Company Supervisor, Cloudfm
Location:	This post will be based at: Cloudfm Group Cloudfm House, Charter Court Severalls Industrial Park Newcomen Way Colchester Essex CO4 9YA

Purpose of the Job:

The University of Essex in partnership with Cloudfm Group offers an exciting opportunity to a graduate with the relevant skills and knowledge to develop a data analytics and visualisation engine for fault detection, risk assessment and multi-layered insight in facilities management (FM).

Duties of the Post:

The main duties of the post will include:

- Investigation of advanced nature inspired computational intelligence / machine learning techniques for dynamic predictive modelling of FM asset operations and dependencies on commercial KPIs.
- Analyse extensive maintenance and business performance datasets for generating predictive and prescriptive models.
- Research into and development of commercial analytics software for statistical and prognostic insight into management and performance of client assets.
- Application of machine learning algorithms for predicting and categorising asset faults using multi-sensory and operational data.
- Development of an automated risk assessment and recommendation system for asset maintenance and operational analysis.
- Design and undertake the implementation of intuitive 2D visualisation tools for data analytics and schematics for on-site and remote inspections.



- Embedding technology and upskilling company staff.
- Through provision of technical advice, support company scale up and exploitation of new technology.
- Preparing academic papers and patents applications.

These duties are a guide to the work that the post holder will initially be required to undertake. They may be changed from time to time to meet changing circumstances.

December 2018

PERSON SPECIFICATION

JOB TITLE: Research Engineer (KTP Associate)	POST REF: REQ02156
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Qualifications /Training

	Essential	Desirable
▪ A degree in Computer/Data Science, Electronic Engineering or Physics, or equivalent level of experience	X	
▪ MSc in Computer Science, Data Science, Electronic Engineering or Physics		X

Experience/Knowledge

	Essential	Desirable
▪ Development and application of computational intelligence / machine learning algorithms	X	
▪ Knowledge and interest in deep learning and fuzzy logic systems	X	
▪ A high level of Python or Java programming ability	X	
▪ Knowledge and interest in data visualisation	X	
▪ Experience of processing and modelling multi-sensor data		X
▪ Commercial data science experience		X

Skills/Abilities

	Essential	Desirable
▪ Effective communication skills to be able to work collaboratively in a small team	X	
▪ Excellent time management skills	X	
▪ Ability to work to deadlines	X	
▪ Good command of written and spoken English	X	
▪ Ability to work independently and as part of a team	X	
▪ Ability to write and publish scientific papers		X

Other

	Essential	Desirable
▪ Can meet the requirements of UK 'right to work' legislation*	X	
▪ An understanding of, and commitment to, equality and diversity	X	
▪ Proactive and committed to the project	X	
▪ Dynamic and self-motivated	X	

* The University has a responsibility under the Asylum, Immigration and Nationality Act 2006 to ensure that all employees are eligible to work in the UK. Prior to commencing employment, the successful candidate will be asked to provide documentary evidence to this effect. The University may be able to offer Tier 2 Sponsorship for this role. For further information about UK immigration requirements please follow this link <https://www.gov.uk/government/organisations/uk-visas-and-immigration>

Working at the University of Essex

The University of Essex is proud to be:

A leading academic institution with an international reputation for the quality of its research and teaching and an international community that is committed to equality and diversity.

Knowledge Transfer Partnerships (KTP)

A Knowledge Transfer Partnership (KTP) is a three-way project between a company, a University and a graduate (known as an Associate), which enables the transfer of knowledge, technology and skills to which the company currently has no access. Supported by the university, KTP Associates manage strategic projects within the company.

A KTP can help graduates to enhance their career prospects by providing them with an opportunity to manage a challenging project, which allows them to use their degree, and is central to an organisation's strategic development and long term growth.

Whilst the Associate leads the KTP project, they are supported by experienced staff from the company and university. They are also assigned a KTP Adviser, who supports them in maintaining good working relationships within the partnership and in planning their professional development in broad terms.

For more information, visit <http://ktp.innovateuk.org>.

Cloudfm Group

Cloudfm was launched in 2011 by a team of FM experts. Having experienced the limitations of conventional solutions, the founders believed that a new approach was required, one that challenges the status quo and validates its claims with tangible results.

Cloudfm is that step change. We understand the importance of our people and ensuring that they are the best they can be which is why we have invested substantially to ensure they have the right environment and support to realise their potential. We have state of the art facilities to train our teams and require an inspirational and extremely motivated professional to help us realise our dream to succeed in being at the forefront of training in our sector.

If you thrive in a fast-paced environment where everyone has a vital role to play and benefits from the support of a friendly team - plus the career-boosting opportunities offered by our state-of-the-art training centre - you should consider joining us. At Cloudfm we offer a wide range of opportunities and considerable scope for progression, enabling people to work to their strengths.

Our clients include prestigious brands in retail; restaurants, commercial property and charities, and our senior team have a proven track record in many more sectors besides. We believe that our unique approach to managing multi-site businesses in the UK and Europe translates to any industry, particularly where rapid response, quality of service and cost control are priorities.

Cloudfm is acknowledged as the most innovative facilities management company in the UK, and our technology team is at the root of that reputation.

We bring the principles of consumer technology to a conservative sector, changing the rules, and changing the behaviour of a whole industry.

School of Computer Science and Electronic Engineering (CSEE)

The School of Computer Science and Electronic Engineering comprises 1,200 students from more than 75 countries, supported by 170 academic, research and support staff. The school is conducting world-leading research in areas such as evolutionary computation, brain-computer interfacing, intelligent inhabited environments and financial forecasting, and boasts the largest robotics research group of its kind in the UK.

For more information, visit <https://www.essex.ac.uk/departments/computer-science-and-electronic-engineering>

General Information

Informal enquiries may be made to the project Academic Supervisor, Dr Faiyaz Doctor (email: fdocto@essex.ac.uk) or Robert Walker, KTP Manager (tel: 01206 874076 email: r.walker@essex.ac.uk). However, applications must be made online.

KTP is funded by a UK Government grant and this appointment carries no expectation of extension beyond the end of the fixed-term contract.

In principle, previous KTP Associates are not eligible to apply. There are some circumstances where a previous Associate can apply for a new KTP. Please check with your previous KT Adviser for information.

Please note that the role holder will be based at Cloudfm Group, located in Colchester, Essex, but may be expected to travel to the University of Essex's Colchester Campus from time to time.

People Supporting Strategy

Please find a link to the People Supporting Strategy.
<http://www.essex.ac.uk/hr/policies/docs/people-oct15.pdf>

Benefits

Our staff and students are members of the University for life. We believe a person's potential is not simply defined by grades or backgrounds, but by willingness to question, to collaborate and to push at the edges of knowledge and their own potential.

As an employer we offer a range of benefits and a commitment to career development and equal opportunities in an environment that both reflects and creates a rich interaction of people, disciplines and ideas.

- Pension scheme
- Generous holiday entitlement
- Competitive salaries
- Training and development
- Family friendly policies
- On campus childcare facilities, for more information visit www.wivenhoeparkdaynursery.co.uk
- Relocation package for qualifying staff
- Interest free season ticket loan
- Range of optional salary exchange tax benefits (pension, childcare and bicycle schemes)

No smoking policy

The University has a no smoking policy

December 2018